

possible adverse impacts on small and medium IXCs as the new rate structure was introduced.¹⁷⁰

103. USTA submits that the portion of the tandem interstate revenue requirement that is included in the TIC includes some costs incurred in the provision of SS7 signalling, line information database (LIDB), and other related signalling services.¹⁷¹ These costs bear no particular relationship to the operation of the tandem switch. As discussed below, under the interim transport rate structure, LECs recover a portion of their SS7 costs through a flat-rated dedicated signalling transport charge assessed on a per-line basis and a flat-rated STP port termination charge. The costs associated with other signalling functions, such as transporting SS7 messages within the signalling network, are not recovered through any facility-based rate element, having generally been incorporated in the transport function, and thus are presumably embedded in the TIC. These SS7 costs relate to services used by all LEC transport customers, and, in the future, potentially to users who are not LEC transport customers. The costs associated with the provision of signalling services are related to the new signalling rate elements discussed below, and if we establish such signalling rate elements, they would not need to be recovered through the TIC.¹⁷²

104. *Tandem-Switched Transport Rate Setting.* The Commission employed several assumptions in setting tandem-switched transport rates, which USTA alleges understate the rates for tandem-switched transport.¹⁷³ First, under the interim transport rules, per minute tandem-switched transport transmission rates between the SWC and the end office were presumed reasonable if they were based on a weighted mix of DS1 and DS3 special access rates and assumed 9000 minutes of use per voice grade circuit per month. USTA argues that the Commission's assumption of 9000 minutes of use per circuit per month for tandem-switched transport circuits resulted in tandem-switched transport rates that were too low.¹⁷⁴ It contends that the actual usage on tandem circuits can be measured and often is far less than the 9000 minutes assumed by the Commission. Second, USTA contends that the use of a per minute tandem-switched transport transmission rate from the SWC to the end office ignores that the SWC-to-tandem segment of tandem-switched transport is provided over a circuit that

¹⁷⁰ *First Transport Order*, 7 FCC Rcd at 7038-39.

¹⁷¹ Letter from Frank McKennedy, Director, Legal and Regulatory Affairs, USTA, to James Schlichting, Chief, Competitive Pricing Division, October 10, 1996, Attachment at 3 (*USTA October 10 Letter*).

¹⁷² *Ameritech December 6 Letter* at 9.

¹⁷³ *USTA October 10 Letter*, Attachment at 10-11.

¹⁷⁴ *USTA October 10 Letter*, Attachment at 10-11.

is dedicated to an IXC.¹⁷⁵ It argues that the failure to price the SWC-to-tandem segment of tandem-switched transport on a flat-rated basis led to some of those costs being included in the TIC. Third, USTA also alleges that tandem-switched transport uses low-density routes between small end offices and tandem switches and thus does not use DS3 circuits to the same extent that DS3 circuits are used for direct-trunked transport service.¹⁷⁶ Thus, according to USTA, the tandem-switched transport rate applicable to these low-density routes is too low. Finally, USTA asserts that distance-sensitive tandem-switched transport rates are too low because the rules used airline miles from the SWC to the end office rather than measuring distance through the tandem office.¹⁷⁷ Each of these assumptions has been said to result in tandem-switched transport rates that produce revenues that are less than costs, with the difference being assigned to the TIC.

105. *Host-Remote Trunking Rate.* The interim transport rules require incumbent LECs to assess tandem-switched transport rates for the carriage of traffic between a host switch and its remote. As with the tandem-switched transport rate itself, USTA argues that the 9000 minutes of use per circuit reflects more usage than actually transits a circuit, and that the trunks do not exhibit the ratio of DS3-DS1 relationship that was employed in setting the tandem-switched transport rate. USTA contends that the rate therefore does not recover all the costs of host-remote trunking.

106. *Multiplexing Costs.* USTA asserts that the existing transport rates for transmission facilities do not account for all multiplexing costs in two instances, and that this results in costs being recovered through the TIC rather than in appropriate facility-based rates.¹⁷⁸ First, it alleges that none of the transmission rates reflects the cost of the DS1/DS0 multiplexing needed to access those end office switches that cannot handle DS1 interfacing, such as analog electronic switches. Such switches constitute approximately 25 percent of the BOC switches.¹⁷⁹ Second, USTA contends that the TIC also includes the two additional multiplexers needed in order to multiplex a DS3 circuit down to a DS1 level before being switched at the tandem, and then back up to DS3 afterward for transmission to an end office. To the extent that analog tandem switches exist, two additional DS1/DS0 multiplexers are needed to achieve the voice-grade interface with the tandem switch.

¹⁷⁵ USTA October 10 Letter, Attachment at 10.

¹⁷⁶ USTA October 10 Letter, Attachment at 10.

¹⁷⁷ USTA October 10 Letter, Attachment at 10.

¹⁷⁸ USTA October 10 Letter, Attachment at 10.

¹⁷⁹ USTA October 10 Letter, Attachment at 9.

107. *Direct-Trunked Transport Rate.* In the *First Transport Order* we established initial direct-trunked transport rates that generally were presumed reasonable if set at the LECs' September 1, 1992, rates for comparable special access services. USTA and other incumbent LECs argue that this resulted in costs being included in the TIC because facilities-based transport rates are too low outside high-volume, low-cost areas. These LECs argue that high-capacity special access is provided primarily in high-volume, low-cost areas, making special access rates a good surrogate for transport rates only in such areas.¹⁸⁰ They assert that transport in low-volume areas has significantly higher costs that are not recovered by rates for transport facilities because those rates were based on rates for special access service, which is more heavily concentrated in low-cost urban areas than is transport. SBC, for example, contends that a study of its interoffice facilities indicates that transport may cost over five times more in low-density areas than in high-density areas.¹⁸¹ These parties submit that these higher costs are included in the TIC.

b. Possible Cost Misallocations

108. As we noted above, the Commission's Part 36 separations and Part 69 cost allocation rules assign costs to access categories, including transport. Some of these costs were included in the TIC when it was established in 1993. Some LECs have indicated that some of the costs included in the TIC result from cost misallocations in these processes, as described below.

109. *Central Office Equipment (COE) Maintenance Expenses.* USTA alleges that the TIC includes costs allocated to transport by current separations and cost allocation procedures that are properly excluded from facility-based transport rates. For instance, the separations rules allocate all expenses for maintaining central office equipment (including circuit equipment, switches, and operator services equipment) among the separations categories for circuit equipment, switching, and operator service on the basis of the apportionment of total COE investment that is allocated to each of those three categories. The separations expense allocations are then carried over into Part 69 and allocated among the interexchange and access categories. These parties contend that a more cost-causative approach would allocate each of these three types of expense based on the allocation of the investment associated with that type of expense. For example, they would allocate circuit equipment maintenance expenses between the jurisdictions and among the Part 69 elements based on the allocation of

¹⁸⁰ USTA October 10 Letter, Attachment at 12-13.

¹⁸¹ See Southwestern Bell Comments in CC Docket No. 91-213, filed Feb. 1, 1993, at 39-45.

circuit equipment investment.¹⁸² The LECs allege that this change would move costs primarily from the TIC to the local switching category.¹⁸³

110. *Use of Circuit Terminations in Separating Costs Between Private Line and Message Services.* Some parties contend that costs are included in the TIC because the separations procedures do not allocate costs to special access and transport categories in the same way, even though, as we concluded in the *First Transport Order*, the two categories of service use similar facilities. Specifically, these parties argue that the use of circuit termination counts in allocating trunking facilities under-allocates costs to the private line separations category. This occurs because a DS1 circuit (which generally carries 24 voice-grade circuits) used for private line service is counted as having only two terminations, while a similar circuit used for switched message services is counted as having 48 terminations (two per voice-grade circuit). Because the Commission used special access rates to establish the initial facility-based transport rate levels, and the TIC was derived from those rates, any under-allocation of costs to special access could result in the TIC containing costs that may be more appropriately recovered through facility-based special access rates.

111. *Over-allocation of costs to the interstate jurisdiction.* Some parties also allege that the TIC recovers costs allocated to the interstate jurisdiction that should properly be allocated to the intrastate jurisdiction.¹⁸⁴ These parties contend that such costs were not included in the special access rates that were the basis for the initial transport rates, and that these costs therefore were included in the TIC.

3. Possible Revisions to the TIC

112. As we have noted earlier, our goals are to move towards significantly more cost-based access rates and competition in the access and interexchange markets. The development of a competitive access market will be distorted by the assessment of the TIC as a surcharge on local switching. The TIC therefore will be unsustainable. In this section we describe several approaches for revising the TIC and raise specific questions concerning the various approaches.

113. As discussed further below, one approach to revising the TIC that has been suggested by some incumbent LECs would be to give them significant pricing flexibility,

¹⁸² For example, if investment was identical for each category, but the expenses were \$25, \$45, and \$20, the separations rules would allocate \$30 to each category rather than the actual expense amounts.

¹⁸³ *USTA October 10 Letter*, Attachment at 12-13.

¹⁸⁴ *See, e.g., USTA October 10 Letter*, Attachment at 14.

thereby permitting them to address the TIC problem in a manner consistent with the dictates of the market. These LECs argue that the presence of unbundled elements makes it possible for competitors to reach all customers immediately and warrants significant pricing flexibility. They request various types of pricing flexibility now, including deaveraged rates, consolidation of price cap baskets, contract carriage, and access rates based on end-user customer class distinctions.

114. Ameritech and NYNEX have made such proposals.¹⁸⁵ Ameritech favors phasing the TIC down over a short transition period of three to five years. Under this plan, the TIC reductions would not affect the basket PCI and thus rate increases for other services would be possible within the current bounds of the price cap rules. NYNEX claims that, if given sufficient pricing flexibility for facility-based rates and the TIC, it will be able to manage access pricing in a way that permits it a reasonable opportunity to recover its costs, while minimizing the effect on the competitive marketplace. For example, NYNEX would deaverage its rates downward in high-density areas to permit it to respond to competition, while leaving its other rates unchanged in order to permit it to continue recovering the existing contribution included in those rates. NYNEX does not propose any specific phase out of the TIC, because it asserts that the market will discipline its pricing practices.

115. We ask parties to comment on the need for some transitional mechanisms given that approximately seventy percent of interstate transport revenues are currently generated from TIC charges. We seek comment on what would constitute a sufficient reason to use a transition mechanism. For example, should any transition consider the extent to which IXC's must make significant adjustments to their network configurations in response to any revised TIC recovery methods? We also seek comment on the duration of any transition period.

116. Alternatively, we could revise the TIC by quantifying and correcting all identifiable cost misallocations and other practices that cause costs to be included in the TIC. This approach would require difficult, detailed analysis of individual LEC cost data and probably would not provide an explanation for all the costs in the TIC. Furthermore, it would undoubtedly identify cost allocation problems that we could not remedy in this proceeding because of the need to refer jurisdictional costs allocation issues to a Federal-State Joint Board. Once identified and quantified, the costs comprising the TIC could be: (1) left in the TIC subject to market pressures; (2) reassigned to various access services (including transport facility-based elements) and to nonregulated activities, as appropriate; (3) recovered in a competitively-neutral manner as a matter of public policy; or (4) removed from the regulated books of account. In evaluating these options, we would bear in mind that the incumbent LECs are in the best position to identify and quantify the reasons costs are in the TIC, and we

¹⁸⁵ *Ameritech December 6 Letter*; Proposal for Universal Service and Access Reform: Post 96-98 Interconnection Order, NYNEX, Nov. 5, 1996.

would therefore place the burden on them to justify particular treatment of TIC costs. As with the preceding approach, we seek comment on the need for, and the duration of, any transition period.

117. As a third method, we could combine the forgoing alternatives. That is, we could reassign some costs to facility-based elements when warranted by forward-looking cost indicia and address the remaining costs in the TIC through a phase-out methodology. Under this approach, we could, for example, reassign those costs that were readily identifiable and quantifiable, or necessary to respond to the court's remand directives, and phase out the remainder of the TIC under either the market-based or prescriptive approach to access reform. We tentatively conclude that this approach better serves the public interest than would an attempt to determine exhaustively the sources of the costs included in the TIC because it is administratively simpler, and it is likely that we could not establish the causes for all the costs included in the TIC. We seek comment on the relationship of this method to whether we select a market-based or prescriptive approach to rate levels, as discussed further below. As with the preceding two approaches, we seek comment on the need for, and the duration of, any transition period.

118. Finally, as a fourth option, we could establish a schedule under which the costs included in the TIC are phased out. Under this option, we would establish a fixed time period during which incumbent LECs could in succeeding years recover a declining portion of the amounts included in the TIC. At the conclusion of the period, LECs could no longer recover any TIC revenues. In conjunction with the option of phasing out of the TIC, a LEC's PCIs, or SBIs, could be adjusted to reflect the phase-out of the TIC, or they could be left unchanged. Again, we seek comment on the relationship of this method to whether we select a market-based or prescriptive approach to rate levels, as discussed further below.

119. We seek comment on the extent to which the above approaches to revising the TIC will achieve the goals of this proceeding. Parties should address the relative merits of each, or of other approaches that they may suggest. In particular, they should address how each plan would accommodate any universal service or residual cost amounts that might be allocated to the TIC. We also seek comment on how each of the above approaches affects small business entities, including small LECs and new entrants.¹⁸⁶ Below, we inquire about specific issues concerning these approaches.

120. In evaluating possible approaches to recovery of the TIC, parties should address the possible explanations set out above for the sums in the TIC, including the reasonableness and significance of each of the explanations. We invite incumbent LECs to quantify the amounts attributable to each explanation. Parties presenting data to quantify amounts in the TIC should include sufficient detail to permit the Commission and interested parties to

¹⁸⁶ See Regulatory Flexibility Act, 5 U.S.C. §§ 601 *et seq.*

evaluate the procedures used and to adjust the results, if necessary, to address concerns raised in the record. Parties are also asked whether there are any additional explanations for the amounts included in the TIC. Parties should quantify their explanations to the extent possible. Finally, we ask parties to comment on whether any interstate costs are included in the TIC that the LECs should be required to write off their regulated books of account as not prudently invested, no longer used and useful, or for some other reason. Any party believing that such costs exist should explain why they should be written off, and provide the legal basis and methodology for doing so. In this connection, they should comment on the approaches discussed in Section VII.B.3, below regarding possible disallowances.

121. In Section V, below, we discuss giving incumbent LECs additional pricing flexibility as certain triggers are satisfied. We ask parties to comment on the relationship of those pricing flexibility approaches to the need for pricing flexibility in conjunction with revising the TIC under any of the methods discussed above, or suggested by any party. For example, because some of the costs in the TIC may result from facility-based rates not reflecting the full costs of serving rural or low-density areas, we ask parties to comment on whether deaveraged pricing is essential to the achievement of our goals with respect to the TIC. We also seek comment on whether other forms of pricing flexibility are essential to reform of the TIC. We invite parties to comment on how any pricing flexibility needed for this purpose would affect the competitive development of the broader access market. We invite parties to comment on whether any public policy reasons would support retaining some costs in the TIC.

122. Any reallocations that may be necessary to implement the elimination or revision of the TIC will give rise to exogenous cost adjustments for price cap LECs under our price cap rules. Parties therefore are asked to comment on whether any special exogenous cost adjustment procedures are necessary to adjust the affected PCIs, APIs, or SBIs. Parties are asked to comment on whether any downward exogenous cost adjustments resulting from access reform should be targeted to the TIC. We also ask parties to comment on what modifications to our access charge rules for rate-of-return LECs are necessary to address any revisions to the TIC that may be adopted. Finally, we ask whether any modifications to the rules applicable to special access services are necessary to accommodate any of the modifications discussed in this section of the Notice.

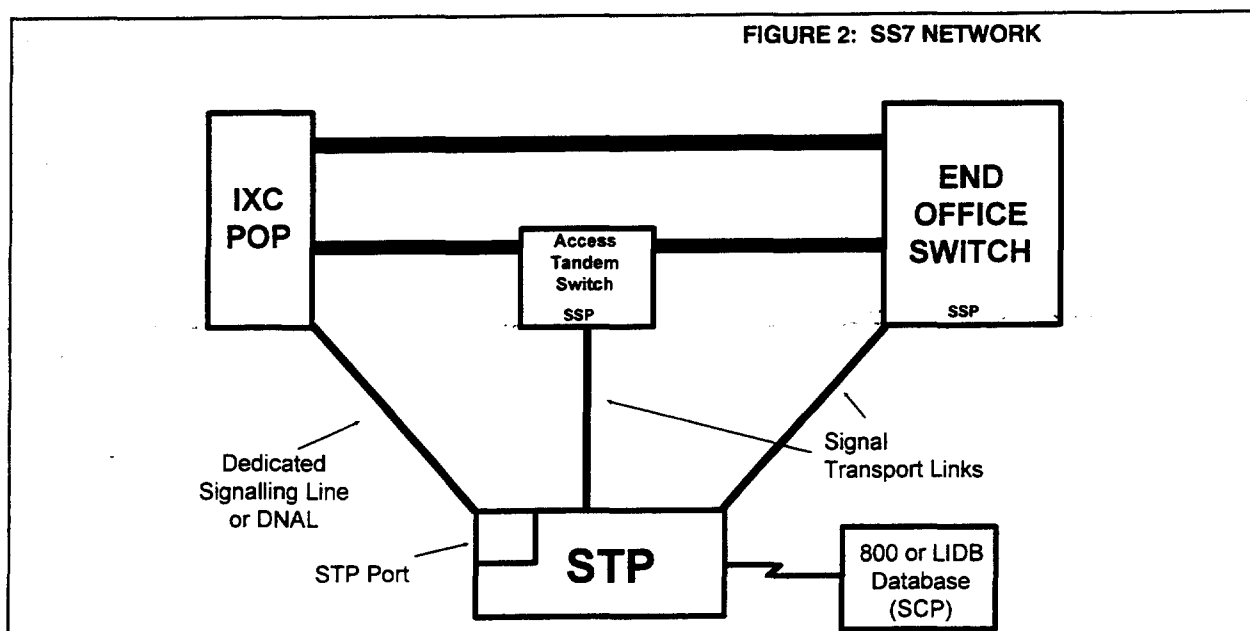
F. SS7 Signalling**1. Background**

123. SS7 is the international standard network protocol currently used to transmit signalling information over common channel signalling (CCS) networks,¹⁸⁷ and consequently those networks are often described as "SS7 networks." The Part 69 rate structure for SS7 services or facilities may not currently reflect the manner in which incumbent LECs incur SS7 costs, and so may skew the development of competition for SS7 services. Therefore, we seek comment in this section on whether and how to revise the rate structure for SS7 services.

124. SS7 networks consist of high-speed packet switches and dedicated circuits that are separate from, but interconnected with, the telecommunications networks over which telephone calls are carried. Incumbent LECs typically use SS7 networks for three purposes: (1) for call setup; (2) to obtain information from remote databases, such as billing information that must be obtained from the line information database (LIDB) to determine whether a calling card is valid, or information identifying the designated carrier of a toll-free 800 service subscriber; and (3) to transmit the information and instructions necessary to provide custom local area signaling services (CLASS features), such as automatic call back and caller ID. The SS7 signalling networks will also play an important role in the implementation of intelligent network (IN) functionality in incumbent LEC networks.¹⁸⁸

¹⁸⁷ "Common channel" refers to the capability of one channel to carry the signalling for many calls simultaneously. Several different terms are used to describe the information that passes over CCS networks; in this Notice we will use the terms "signalling," "messages," and "queries" relatively interchangeably.

¹⁸⁸ See, e.g., Intelligent Networks, CC Docket No. 91-346, Notice of Inquiry, 6 FCC Rcd 7256 (1991).



125. As illustrated in Figure 2 above, incumbent LEC CCS networks generally include the following basic components. Dedicated network access lines (DNALs) are dedicated circuits that transmit queries between incumbent LECs' signalling networks and the signalling networks of other carriers, such as IXC's. The DNAL can be provided by the incumbent LEC or by the other carrier, although incumbent LECs generally provide the DNAL under their current SS7 tariffs. The DNAL is connected to a port on an incumbent LEC's signal transfer point (STP), a specialized packet switch that performs screening and security functions, and switches SS7 messages within the incumbent LEC signalling network. Messages within the incumbent LEC signalling network travel over signal transport links, which are typically dedicated DS1 circuits. SS7 messages are formulated within the incumbent LEC signalling network at service switching points (SSPs), which are generally end office and tandem switches with the necessary software. Finally, service control points (SCPs) are computer databases that respond to network signalling queries and perform related functions. An additional term that is often used in describing SS7 networks is a signalling point (SP), which refers to any point on an SS7 network that formulates or switches signalling queries.

126. Under the interim transport rate structure, incumbent LECs charge IXC's and other access customers a flat-rated charge (called "dedicated signalling transport" in Part 69 of the rules) for the use of dedicated facilities to connect to the incumbent LECs' signalling networks.¹⁸⁹ This rate element is composed of two subelements: a flat-rated signalling link charge for the DNAL, and a flat-rated STP port termination charge. Most other SS7

¹⁸⁹ 47 C.F.R. § 69.125.

signalling costs, including those for switching messages at the local STP, for transmitting messages between an STP and the incumbent LEC end office switch or tandem switch, and for processing and formulating signal information at an end office or tandem switch, are not recovered through facility-based charges, and thus most, if not all, of these costs are presumably embedded in the TIC and the local switching charge. At SCPs, such as the 800 and LIDB databases, incumbent LECs typically assess a per-query charge for the retrieval of information and the transmission of the query to and from the database.¹⁹⁰ Incumbent LECs also recover costs associated with the provision of certain signalling information necessary for third-parties to offer tandem switching through the "signalling for tandem switching" rate element.¹⁹¹

2. Ameritech's SS7 Rate Structure

127. On March 27, 1996, the Common Carrier Bureau granted Ameritech a waiver to restructure the manner in which it recovers its SS7 costs. The rate structure established by Ameritech pursuant to that waiver recovers costs associated with the provision of SS7 signalling services through four unbundled charges for the various functions performed by incumbent LEC CCS networks: (1) signal link; (2) STP port termination; (3) signal transport; and (4) signal switching.¹⁹² We invite comment on using the waiver granted to Ameritech as a model for a revised SS7 rate structure for the industry as a whole.

128. Signal Link. We seek comment on whether costs associated with the DNAL -- the dedicated facility connecting an SS7 customer's network to a dedicated port on the incumbent LEC's STP -- should continue to be recovered through a flat-rated distance-sensitive signal link charge.¹⁹³ Flat-rated cost recovery appears reasonable because the DNAL is a dedicated circuit serving a single SS7 customer, similar to those circuits used to provide special access or direct-trunked transport. Incumbent LECs' SS7 customers could provide their own DNAL, or purchase a DNAL from the incumbent LEC by paying the signal link

¹⁹⁰ See, e.g., 47 C.F.R. § 69.120 (defining the LIDB per-query charge).

¹⁹¹ 47 C.F.R. § 69.129. In the *Expanded Interconnection* proceeding, the Commission required Tier 1 incumbent LECs (excluding members of the National Exchange Carrier Association (NECA)) to provide to interested third parties signaling information necessary to provide tandem switching. *Expanded Interconnection with Local Telephone Company Facilities*, CC Docket No. 94-141, Transport Phase II, Third Report and Order, 9 FCC Rcd 2718 (1994). This requirement was intended to permit competitive access providers (CAPs), IXC's, and end users with the ability to offer competitive tandem-switching services.

¹⁹² Ameritech Operating Companies Petition for Waiver of Part 69 of the Commission's Rules to Establish Unbundled Rate Elements for SS7 Signalling, Order, 11 FCC Rcd 3839 (Com. Car. Bur. 1996) (*Ameritech SS7 Waiver Order*).

¹⁹³ 47 C.F.R. § 69.125(b).

charge. We also seek comment on whether the signal link should remain in the transport service categories in the trunking basket.¹⁹⁴

129. STP Port Termination. We seek comment on whether the costs associated with the dedicated port on the incumbent LEC's local STP that connects to a customer's DNAL should be recovered through a flat-rated charge. This charge would include the portion of costs currently recovered through the STP port termination subelement associated with the STP port, but not the costs recovered through that subelement today associated with the screening and switching functions of the STP, which we understand are not performed by the port. Because the STP port termination costs are dedicated to a particular SS7 customer, we ask whether they should be recovered on a flat-rated basis.

130. We also seek comment on whether the STP port termination element should be placed in a new service category in the traffic-sensitive basket. Although STP port termination rates today are in the same service category as the signalling link, these two services are subject to different competitive conditions. Specifically, although interconnectors can provide their own signal link, the STP port is part of the incumbent LEC's STP and therefore must be purchased from the incumbent LEC. Consequently, incumbent LECs could offset reductions in their charges for the signal link with increases in the STP port charges if STP port termination and the signal link remained in the same service category. The STP port termination element appears analogous to the dedicated line cards and trunk cards discussed in the local switching rate structure discussion above, and therefore we seek comment on whether it should be placed in a new "signalling" service category in the traffic-sensitive basket. Recognizing that STP port costs may be relatively small compared to signal link costs, we seek comment on whether the benefits we have identified outweigh the administrative burdens of implementing such a system and creating a new price cap service category. Another alternative would be to remove the STP port termination element, and other non-competitive SS7 elements essential for interconnection, from price caps entirely, as we have done for expanded interconnection. We seek comment on this option.

131. Signal Transport. The circuits that carry SS7 queries between STPs, switches, and SCPs within incumbent LEC signalling networks are comparable to the shared circuits incumbent LECs use to provide transport between end office and tandem switches. SS7 queries associated with many different calls traverse the same signal transport links simultaneously, and so a usage-sensitive charge for these shared facilities appears appropriate. As with signal switching, discussed below, the costs of signal transport appear most closely related to the number of queries, and therefore we seek comment on whether this charge should be assessed on a per-query basis. We also seek comment on whether incumbent LECs should be permitted to charge distance sensitive rates for signal transport, and the appropriate level of distance sensitivity that should be allowed.

¹⁹⁴ See 47 C.F.R. § 61.42(d)(3).

132. It appears that signal transport is a form of transport, and therefore we invite comment on placing this service in the trunking basket. We also invite comment on placing signal transport in the existing "signalling for tandem switching" service category. In addition, interested parties may discuss whether to place this service in a separate service category from the signal link, because the signal link may be provided by other carriers while signal transport generally must be performed by the incumbent LEC.

133. Signal Switching. We seek comment on whether costs related to processing and switching by the STP should be recovered on a per-query, usage-sensitive basis.¹⁹⁵ These costs are similar to the costs incurred in switching telephone calls at end office and tandem switches. Unlike end office and tandem switches, however, STPs switch only data, and a single call may involve multiple instances of signal switching. Because the costs associated with signal switching relate more to the number of SS7 queries switched than to the number or duration of calls, we ask whether the signal switching charge should be assessed based on the number of SS7 messages switched. For the reasons we have identified above in the context of central office and tandem switching, we seek comment on whether peak load pricing would be appropriate for signal switching.

134. We propose to place this service in the traffic-sensitive basket. We further seek comment on whether to place this service in the same service category as the STP port termination charge, or whether to create a new service category for signal switching.

3. Other SS7 Issues

135. We also invite parties to suggest alternative rate structures for SS7 signalling. For example, we permitted Ameritech to implement rate elements for signal tandem switching, signal formulation, and optional parameters. We also seek comment on whether incumbent LECs should be permitted to impose separate charges for ISDN User Part (ISUP) messages, which are used in setting up and taking down calls, and Transaction Capabilities Application Part (TCAP) messages, which are used primarily for database queries and CLASS services such as enhanced caller ID, or whether some other differentiation should be made between charges for different types of SS7 messages.¹⁹⁶ Although such differentiation could be economically justified on the basis of the different average lengths of ISUP and TCAP queries (and therefore the differential load they tend to place on the SS7 network), we

¹⁹⁵ "Per-query" here is used to refer to a charge for each SS7 message passing through a particular point. Although the term "per-message" is used in some contexts with this meaning, this term is also used in some contexts to refer to charges that vary based on the number of calls, rather than on the number of signalling queries, and so we will avoid it here in the interest of clarity.

¹⁹⁶ The designation "ISDN User Part" refers only to an official protocol that supports ISDN connections, and does not mean that only calls using ISDN can be set up using these messages.

question whether we should do so in the interests of rate structure simplicity. To the extent that parties contend that differentiated charges for TCAP and ISUP messages should be adopted, we ask those parties to provide specific information and data to support such a claim. Parties that favor an alternate structure are asked to provide details of any such alternatives, and to explain how such alternatives would be consistent with the goals of this proceeding. In particular, we ask parties to discuss ways in which the SS7 rate structure we have proposed could be simplified. The desire for rate structure simplicity may conflict with the goal of economic cost-causation, and we seek comment on the appropriate manner in which we should strike this balance for SS7 signalling.

136. We seek comment on whether the pricing for facility-based signalling rate elements should be determined under the price caps new services test. As we discussed in the *Ameritech SS7 Waiver Order*, although the proposed SS7 rate elements would probably be considered restructured services under our price cap rules, we tentatively conclude a requirement of revenue neutrality and the cost showing specified under the new services test would serve the public interest in this context.¹⁹⁷ The different SS7 elements are likely to be subject to different competitive pressures, and the current rate structure does not provide a sufficient basis, absent a cost showing by incumbent LECs, on which to base the rates for these new charges.

137. Incumbent LECs may need to install additional monitoring equipment in order to bill properly for unbundled SS7 services. Some incumbent LECs may not currently have the capacity to meter any SS7 traffic, and some incumbent LECs may only have such metering capacity at STPs, not at signalling points in tandem offices.¹⁹⁸ We seek comment on the feasibility and cost of mandating a rate structure for SS7 services that would require incumbent price cap LECs to install equipment for metering SS7 traffic in their networks. We also invite comment on whether and the extent to which the costs of any equipment needed to comply with our proposed rules warrant exogenous cost treatment under our price cap rules.¹⁹⁹ In the *800 Database* proceeding, the Commission permitted incumbent LECs exogenous treatment of the reasonable costs they incurred specifically to provide basic 800

¹⁹⁷ *Ameritech SS7 Waiver Order*, 11 FCC Rcd at 3856-57.

¹⁹⁸ Ameritech, for example, stated that it currently is capable of metering SS7 traffic only at STPs. Because Ameritech's STPs were not capable of distinguishing direct-routed and tandem-switched calls, and tandem-switched calls require additional use of the signalling network, Ameritech proposed an additional "signal tandem switching" rate element to recover the signal switching and signal transport costs involved with providing signalling for a tandem-switched call.

¹⁹⁹ See 47 C.F.R. § 61.45(d)(1)(vi).

database service.²⁰⁰ Unlike the rules we adopted in the *800 Database* proceeding, however, the SS7 rules we are contemplating here would not require incumbent LECs to provide any service they are not currently providing. The rules instead would require incumbent LECs to recover the costs of any SS7 service they choose to provide in a fashion that reflects the way they incur those costs. Thus, the costs of SS7 metering equipment may not warrant exogenous cost treatment.

138. We tentatively conclude that, under the proposal described above, the existing charge incumbent LECs assess on third party tandem switching providers (TSPs) for the provision of signalling codes necessary for those TSPs to interconnect their tandem switches with incumbent LEC transport networks should be eliminated and replaced by charges for the specific SS7 functions associated with providing this signalling information. Although this charge serves a particular purpose, this service appears to use the same basic SS7 functions as other signalling services. Thus, although the "signalling for tandem switching" service category would remain in the trunking basket, that category would include only the newly-created signal transport element, and would be renamed as the "signalling transport" service category. We seek comment on this analysis. Even if we do not eliminate the existing signalling for tandem switching charge, we have proposed to place several new rate elements into the existing signalling for tandem switching service category that recover some costs not related to tandem switching. Signal transport, for example, recovers costs for signalling associated both with tandem-switched and with direct-trunked calls. In order to avoid confusion, we tentatively conclude that the signalling for tandem switching service category in the trunking basket should be renamed as the "signalling" service category.

G. New Technologies

139. Developments in switching and transmission technology are producing new telecommunications capabilities that offer the potential for new services and lower prices in the future.²⁰¹ These include synchronous optical networks (SONET),²⁰² Asynchronous

²⁰⁰ Provision of Access for 800 Service, CC Docket No. 86-10, Second Report and Order, 8 FCC Rcd 907, 911 (1993).

²⁰¹ See Letter from Kenneth McClure, Chairman, NARUC Communications Committee, to Reed Hundt, Chairman, FCC, dated Oct. 23, 1996 (*NARUC October 23 Letter*) at 55.

²⁰² SONET uses a synchronized digital fiber optic hierarchy to transport special access services at operating speeds from 1.5 Mbps to 2.4 Gbps, with circuit performance monitoring and advanced network alarming and management. See, e.g., Pacific Bell Tariff F.C.C. No. 128, Transmittal No. 1790, Order, 10 FCC Rcd 7362 (Com. Car. Bur. 1995); US West Communications Revisions to Tariff F.C.C. No. 1, Transmittal No. 80, Order, 5 FCC Rcd 5546 (Com. Car. Bur. 1990); Petitions for Waiver of Part 69 of the Commission's Rules to Establish Switched Access Rate Elements for SONET-based Service, Memorandum Opinion and Order, DA 96-2004 (Com. Car. Bur., rel. Dec. 2, 1996). SONET may be deployed in the traditional star configuration, or in a fiber

Transfer Mode (ATM)²⁰³ switching, and advanced intelligent networks (AIN).²⁰⁴ We seek comment on whether, and how, we should take these new technologies into account in adopting access charge rules. We also invite parties to recommend specific rate structure rules that would reflect the manner in which incumbent LECs incur costs when providing services using these technologies. We also seek comment on whether we should adopt access charge rules to govern rate structures for services employing any other new technologies.

IV. APPROACHES TO ACCESS RATE REFORM AND DEREGULATION

A. Different Approaches to Access Reform

140. Our overriding goal in this proceeding is to adopt revisions to our access charge rules that will foster competition for these services and eventually enable marketplace forces to eliminate the need for price regulation of these services. In addition to the rate structure changes discussed above, we suggest in this Notice two different approaches to access reform -- a market-based approach and a more prescriptive approach. We could adopt a market-based approach to access reform under which we would let marketplace pressure move interstate access prices to competitive levels. This approach could be implemented incrementally, first eliminating certain regulatory constraints as incumbent price cap LECs demonstrate through credible, verifiable evidence that the conditions necessary for efficient local competition to develop in their service areas exist. Then, as incumbent LECs show that competition has emerged, additional regulatory constraints, including mandatory rate structures, would be eliminated to allow those LECs to adjust their interstate access rates. Finally, when substantial competition has developed, price regulation would be eliminated.

141. Some parties, however, may contend that a market-based approach will allow incumbent LECs to continue indefinitely to assess inflated prices for some or most access

ring arrangement. In the star configuration, SONET provides wider transmission band widths (or higher speeds) than non-SONET "asynchronous" digital networking technologies. It also provides an easier means of adjusting band widths at nodes within the network, because it allows information to be easily added to, and dropped off, a high-speed fiber optic circuit without the need to demultiplex the entire signal down to its component lower-speed channels and then multiplex the signal back to its original speed.

²⁰³ ATM is a packet switching protocol in which all information transmitted over the network -- whether voice, video, or data -- is split into small fixed-length cells. *See generally* Sharon Watson, *Have ATM, Will Travel*, *Telephony*, Apr. 24, 1995, at 32. ATM networks are especially well-suited for broadband multimedia transmission, because they allow extremely high-speed transmission and switching of different types of information.

²⁰⁴ AIN is a telecommunications network in which call processing and routing, and network management are provided by means of centralized databases, rather than from a comparable database at every switching system. *See Ameritech SS7 Waiver Order*, 11 FCC Rcd at 3868.

services in some or most geographic areas.²⁰⁵ These parties would urge us to adopt a prescriptive approach to access reform. Under this approach, we would require incumbent LECs to move their prices to specified levels and allow such LECs limited pricing flexibility until they can demonstrate they face actual competition for access.

142. A market-based approach has a number of advantages. It creates incentives for incumbent LECs to act quickly to open the local exchange and exchange access market to competition, by making that a condition for having additional flexibility to respond to competition from facilities-based competitors. It allows marketplace forces, rather than regulation, to determine how quickly prices move to cost-based levels. A market-based approach also has some disadvantages. Marketplace forces may not require incumbent LECs to assess cost-based prices for access prices as quickly as a prescriptive approach. It may also be difficult to develop reliable, administratively simple criteria for assessing evidence of competitive entry and determining the existing regulatory constraints that should be relaxed based on such a showing.

143. Conversely, the advantages to a prescriptive approach are that the Commission can move prices to cost-based levels quickly and avoid the need to develop criteria for determining whether competition is sufficient to allow incumbent LECs additional pricing flexibility. The principal disadvantage to a prescriptive approach is that it requires the Commission to make detailed determinations of appropriate price levels for multiple services throughout the country. Another disadvantage is that, in the event an incumbent LEC can show its embedded costs are significantly higher than its forward-looking costs, the Commission would be required to determine how much of the difference incumbent LECs should be given a reasonable opportunity to recover and the method for that recovery.

144. We set forth below both a market-based approach and a more prescriptive approach. We seek comment on whether we should: select one of the two approaches as our exclusive method of reforming access charges in a manner that is most likely to lead to the conditions that will enable us to deregulate access charges; adopt both approaches as alternatives; or merge the two approaches in some fashion. For example, if barriers to competition are not eliminated, a market-based approach to access reform likely would not work. If a market-based approach were adopted, we might nonetheless seek to ensure that prices move toward economic cost even though barriers to competition are not eliminated within a reasonable time for certain services or in some geographic areas, by adopting an alternative prescriptive approach for those services or geographic areas.

145. Commenters advocating a merger of both a market-based approach and a prescriptive approach should describe how the two approaches can be melded. For example,

²⁰⁵ See, e.g., "MCI Urges FCC to Fold Price cap Proceeding Into Access Charge Reform," *Communications Daily*, Vol. 16, No. 239, Dec. 11, 1996, at 2.

what criteria should be used for determining whether to impose prescriptive access reform and at what time? How would a combination of the two approaches work if barriers to competition were eliminated, but later reinstituted?

146. Commenters proposing a melding of both approaches should also discuss any regulatory safeguards that may be needed. For example, an incumbent LEC might face different regulatory regimes in different parts of its service region, or for different access services. This may create an incentive for incumbent LECs to increase costs artificially for the services or areas that are subject to prescriptive regulation or less competition. Incumbent LEC incentives to misallocate costs in this manner would depend on whether such cost changes would affect incumbent LEC rates under prescriptive regulation, and on the magnitude of any such effect.

147. We have previously faced issues that arise when an incumbent LEC is subject to different regulatory regimes for different access services, in the context of the BOCs' provision of enhanced services. Specifically, the Commission decided not to regulate enhanced services because the market for such services is competitive.²⁰⁶ The Commission currently employs accounting safeguards designed to prevent common carriers from shifting costs from nonregulated to regulated services, without precluding them from taking advantage of any economies of scope.²⁰⁷ We adopted the "all or nothing" rule in the *LEC Price Cap Order* to address similar concerns about incumbent LECs shifting costs from affiliates governed by price cap regulation to affiliates governed by rate-of-return regulation.²⁰⁸ Should similar safeguards be adopted if a combination of market-based access reform and prescriptive access reform is adopted? We also invite comment on whether there are any other issues raised by applying different regulations to different services or areas.

148. We also seek comment generally on how incumbent LEC provision of in-region interLATA services -- either by independent incumbent LECs or potentially by BOCs upon FCC approval under section 271 -- should affect our choice of a market-based or prescriptive approach, or the phases for implementing each approach. Conversely, we seek comment on

²⁰⁶ See, e.g., Regulatory and Policy Problems Presented by the Interdependence of Computer and Communications Services and Facilities, Docket No. 16979, Final Decision and Order, 28 FCC 2d 267, 270 (1971).

²⁰⁷ See, e.g., Amendment of Section 64.702 of the Commission's Rules and Regulations, CC Docket No. 85-229, Phase I, Report and Order, 104 FCC 2d 958 (1986); *recon.* 2 FCC Rcd 3035 (1987); *further recon.* 3 FCC Rcd 1135 (1988); *second further recon.* 4 FCC Rcd 5927 (1989); *vacated in part sub nom.* People of the State of California v. FCC, 905 F.2d 1217 (9th Cir. 1990).

²⁰⁸ *LEC Price Cap Order*, 5 FCC Rcd at 6819-20. The "all or nothing" rule requires all LECs adopting price cap regulation to convert all its subsidiaries to price cap regulation, and to convert any LECs it may acquire in the future to price cap regulation.

how our selection of a market-based or prescriptive approach should affect, if at all, our consideration, of BOC applications, for in-region provision of interLATA services. As discussed earlier in Section I.B, IXC's argue that, to the extent access services are not available to IXC's at their forward-looking economic cost, incumbent LEC's and their long-distance affiliates will have an artificial competitive advantage in the market for long-distance services that may distort the effects of competition and result in inflated retail prices. We ask parties concerned about a possible "price squeeze" to identify the conditions under which we should be concerned. We ask parties to comment on whether the availability of unbundled network elements at their forward-looking economic cost would reduce the danger of a price squeeze insofar as IXC's might use those elements to provide their own access to customers for whom they are the local service provider.

B. The Goal -- Deregulation in the Presence of Substantial Competition

1. Objectives

149. Regardless of the specific approach that we adopt in this proceeding -- market-based, prescriptive, or some combination of the two -- our goal is to foster the development of substantial competition for interstate access services. Once substantial competition is present for a particular service in a particular area, we propose to remove that service from price cap and tariff regulation for that area.

150. Our plan to remove from price cap regulation interstate access services that are subject to substantial competition is consistent with prior decisions in which the FCC gradually removed AT&T's services from price cap regulation.²⁰⁹ Our analysis of whether AT&T's services were subject to substantial competition rested on considerations of market share, demand responsiveness, supply responsiveness, and AT&T's pricing behavior. We recognize, that unlike AT&T, incumbent LEC's control bottleneck facilities, particularly the loop. Nevertheless, the 1996 Act seeks to erode this source of market power by requiring incumbent LEC's to make unbundled network elements and resale available. In view of the similarities between the structure of and purposes behind the AT&T and the LEC price cap plans, the analytical framework that we used to streamline AT&T's services would appear to be an appropriate method for effectively deregulating incumbent LEC services. We also propose to eliminate tariff filing requirements for services subject to substantial competition.²¹⁰ We seek comment on whether these actions are appropriate under these conditions, and whether we should adopt any other deregulatory measures when an incumbent LEC service is

²⁰⁹ See Competition in the Interstate Interexchange Marketplace, CC Docket No. 90-132, Report and Order, 6 FCC Rcd 5880 (1991) (*Interexchange Order*); Revisions to Price Cap Rules for AT&T Corp., CC Docket No. 93-197, Report and Order, 10 FCC Rcd 3009 (1995).

²¹⁰ 47 U.S.C. § 160(a).

subject to substantial competition. Below, we seek comment on the factors used in examining AT&T's pricing behavior. We invite comment on which of these, alone or in conjunction with these or other factors, could be used to determine when to remove incumbent LEC access services from price cap regulation.

151. We propose that the substantial competition analysis should be considered on a service-by-service basis so that, for example, directory assistance could be removed from price cap regulation where substantial competition exists for directory assistance, even if not for local switching. Such an approach is consistent with our approach to removing AT&T's services from price cap regulation, and would allow incumbent LECs to price competitively where competition has developed, while not permitting incumbent LECs to raise prices for services for which competition has not developed sufficiently.²¹¹

152. We ask commenters to address whether, instead of requiring the presence of substantial competition, we should remove from price cap regulation services for which the incumbent LEC cannot influence price movements. There may be circumstances in which incumbent LECs cannot affect price changes in the market, even in the absence of substantial competition. Our public interest concern is whether incumbent LECs can adversely affect price movements. Using such an approach may remove an incumbent LEC's services from price cap regulation even if no competitors enter the market, but the incumbent LEC has complied with the requirements of the 1996 Act.

153. We further ask whether high-capacity special access services, *e.g.*, those special access services offered at speeds of DS1 or higher, should be removed immediately from price cap regulation. Many incumbent LECs contend that for certain geographic markets these special access services are already subject to intense competitive pressures that today discipline incumbent LEC pricing of such services. If these allegations are correct, our pro-competitive goals could be served by removing these services from price caps. We ask parties to address the degree of competition that exists for such services, including any quantification that may be available. We invite parties to comment on whether any other incumbent LEC services in particular geographic areas are already subject to substantial competition and therefore should be removed from price cap regulation.²¹²

154. We solicit comment on the procedures that an incumbent LEC should follow to demonstrate that one or more services are subject to substantial competition. Parties should

²¹¹ Such an approach appears to be favored by incumbent LECs; we have received several petitions in which incumbent LECs seek exemption from price cap regulation for particular services in certain geographic markets. *See* Petition to Regulate Bell Atlantic as a Nondominant Provider of Interstate InterLATA Corridor Service (filed July 7, 1995); Ameritech Communications, Inc. Petition for Nondominant Status (filed July 21, 1995).

²¹² *See* n. 211, *supra*; *see also* Ameritech Dec. 6 Letter at Appendix A at 12.

discuss whether an incumbent LEC should file a petition for waiver, a petition for declaratory ruling, or some other filing, and how the incumbent LEC should satisfy its burden of proof. In addition, we tentatively conclude that we should adopt rules governing the recalculation of the price cap indices when one or more services in a basket are removed. Such rules would speed the review of the tariffs that incorporate the recalculated indices. We invite parties to comment on this tentative conclusion, and to propose particular rules that we should adopt.

155. We also seek comment on what geographic area should be used in examining whether a service is subject to substantial competition. The level of competition for different services likely will vary by geographic area, even within the same state. Thus, we propose not to rely on a statewide analysis of competition. We seek comment on whether the relevant geographic areas should conform to the areas implemented by the relevant state in making unbundled network elements available to competitors. Because the costs of competitors using unbundled network elements will be affected by these geographic areas, it may be appropriate that incumbent LEC access prices vary according to them. We acknowledge that it is possible that competition can vary significantly even within such a zone.²¹³ Alternatively, should we require that the geographic areas coincide with the zones adopted in the Universal Service proceeding to determine high cost areas?²¹⁴ A third approach would be to use the same geographic areas that we might select for geographic deaveraging if we were to adopt the market-based approach set out in Section V, below. We seek comment on these options.

²¹³ See, e.g., New York Telephone Company and New England Telephone and Telegraph Company, Memorandum Opinion and Order, 10 FCC Rcd 5070 (Com. Car. Bur. 1995).

²¹⁴ The Joint Board concluded that the 1996 Act explicitly delegated authority to the state commissions to designate the area throughout which a carrier must provide the defined core services in order to be eligible for universal service support. The Joint Board also recommended that this Commission urge states to designate service areas for non-rural telephone company areas that are of sufficiently small geographic scope to permit efficient targeting of high cost support and to facilitate entry by competing carriers. *Universal Service Recommended Decision* at paras. 175-78.

2. Competitive Factors

a. Demand Responsiveness²¹⁵

156. Incumbent LECs may seek to demonstrate that the market for particular interstate access services is competitive through evidence indicating that, where comparable access services are available to the incumbent LECs' customers, a significant number of those customers have the ability to evaluate the full range of market options available to them, and the customers do in fact exercise these options. We therefore propose that the demand responsiveness of the incumbent LECs' customers should be an important factor in assessing the level of competition for incumbent LEC services for purposes of determining whether a service should be removed from price cap regulation. We seek comment on this proposal. Parties should identify the relevant factors that should be used in determining whether an incumbent LEC's customers are demand-responsive; the data and information that would be necessary and relevant in determining whether an incumbent LEC's customers are demand-responsive; and whether the fact that incumbent LECs have relatively few customers that account for most of their interstate access demand affects the usefulness of demand-responsiveness as a factor in determining the level of competition. Alternatively, we seek comment on the proposal that a LEC need only provide evidence that comparable access services are available from other carriers and need not provide evidence specifically on demand responsiveness.

b. Supply Responsiveness²¹⁶

157. We invite comment on whether supply responsiveness should be a factor in determining the level of competition for purposes of determining whether specific interstate access services should be removed from price cap regulation. If so, we ask parties to identify the factors that are relevant in determining whether an incumbent LEC's competitors have enough readily-available supply capacity to constrain the incumbent LEC's market behavior and inhibit it from charging excessive rates; and the data and information that would be necessary and relevant in determining whether an incumbent LEC's competitors are supply-

²¹⁵ Demand responsiveness measures the sensitivity of the quantity demanded to price changes. Demand responsiveness is typically measured by the elasticity of demand, which is the percentage change in the quantity demanded for a particular product will be following a one percent change in the price of that product. Robert S. Pindyck and Daniel L. Rubinfeld, *Microeconomics* 29 (1992).

²¹⁶ Supply responsiveness is typically measured using the elasticity of supply, a concept parallel to that used for demand elasticity. Supply elasticity measures the percentage change in the quantity supplied that results from a one percent change in the price of a product. *Id.* at 32. A high supply elasticity indicates that entry is relatively easy and that any attempt by an incumbent to raise prices will result in new entry. Conversely, a low supply elasticity is indicative of market power.

responsive.²¹⁷ Supply elasticities of an incumbent LEC's competitors may be important in assessing the level of competition for incumbent LEC services. However, we tentatively conclude that the ready availability of unbundled network elements at forward-looking economic cost decreases the cost of entry for access services. Their ready availability would indicate a high supply elasticity in the access market.

c. Market Share

158. As we observed in the *Price Cap Second FNPRM*, at the time we considered giving AT&T streamlined regulation for certain long-distance services, we determined that a high market share does not necessarily confer market power.²¹⁸ A company that enjoys a very high market share will be constrained from raising its prices above cost if the market is characterized by high supply and demand elasticities at prices even slightly above competitive levels.²¹⁹ An analysis of the level of competition for incumbent LEC services based solely on an incumbent LEC's market share at a given time may not provide sufficient evidence for us to conclude that substantial competition truly exists. While we do not propose to ignore market share data in assessing the level of competition for incumbent LEC services, we propose to consider market share in conjunction with other factors, including, but not necessarily limited to, supply and demand elasticities and pricing trends. We ask parties whether market share should be a factor in determining the level of competition for purposes of determining whether services should be removed from price cap regulation. If so, we ask parties to discuss how market share should be measured.

d. Pricing of Services Under Price Cap Regulation

159. Evidence that a price cap LEC is pricing services below the price cap ceiling over a sustained period may indicate that such services are subject to competitive pressures, particularly in markets with high supply and demand elasticities. An incumbent LEC's below-cap pricing of services, however, is not necessarily a reliable measure of competition.

²¹⁷ The incumbent LEC's elasticity of demand is affected by new entrants' elasticity of supply. It can be shown that the incumbent LEC's demand becomes more responsive to changes in price as the new entrants' supply becomes more elastic and their market share increases. These results indicate that as new entrants become capable of supplying access services to more customers, an increase in access prices by the incumbent LEC results in a larger decrease in the quantity of access services purchased from the incumbent LEC and an increase in the amount supplied by the new entrants. See Carleton and Perloff, *Modern Industrial Organization* 158-69, 172-74 (1993).

²¹⁸ *Price Cap Second FNPRM*, 11 FCC Rcd at 922 (citing *Interexchange Order*, 6 FCC Rcd at 5890; *Revisions to Price Cap Rules for AT&T Corp.*, CC Docket No. 93-197, Report and Order, 10 FCC Rcd 3009, 3015 (1995)).

²¹⁹ *Interexchange Order*, 6 FCC Rcd at 5887.

While below-cap pricing may indicate a market with high supply and demand elasticities, it could also occur because the incumbent LEC is behaving strategically in order to be relieved of regulation. Pricing at the cap may be evidence of a lack of competition, or that the cap is close to the forward-looking economic cost of the service. How much significance should we give to evidence that a price cap LEC is pricing services below the price cap ceiling over a sustained period?

e. Other Factors

160. We invite comment and discussion on whether there are other factors in addition to those discussed above that we should consider in an evaluation of the competition faced by an incumbent LEC, for example elimination of barriers to entry in the event it is not otherwise required. Parties that suggest other factors to assess the level of competition for incumbent LEC services should discuss what data and information would be necessary to assess the relative importance of these factors.

V. MARKET-BASED APPROACH TO ACCESS REFORM

A. Introduction

161. In this section, we seek comment on an approach to access reform that relies on marketplace forces to move interstate access prices to more economically efficient levels. Under this approach, our primary role would be to remove regulatory requirements that inhibit the operation of market forces. In the Third Report and Order, below, we begin this process by adopting two immediate changes: we eliminate the price caps lower service band indices; and we ease substantially the requirements necessary for the introduction of new interstate access services.²²⁰ In Section III, above, we propose rate structure changes designed to make the baseline regulatory scheme more efficient. In this section, we propose a plan for reducing regulation in two phases as competitive benchmarks are achieved short of substantial competition.²²¹

162. Using a competitive paradigm, the issue becomes one of identifying the market conditions that should trigger the removal of existing regulatory constraints. Under the procedure we propose in this section, we would implement regulatory reforms as incumbent

²²⁰ See Section IX, *infra*.

²²¹ In the *Price Cap Second FNPRM*, we mentioned three significant phases at which it may be appropriate to remove regulatory constraints: (1) the removal of certain barriers to competitive entry; (2) the point where a particular service is subject to substantial competition; and (3) the point where a carrier no longer can exercise market power in the provision of that service. *Price Cap Second FNPRM*, 11 FCC Red at 861-62, 905-08, 915-23, 927-30.

LECs demonstrate that their local markets have achieved pre-defined, specific transition points, or "competitive triggers." We are seeking comment on removing uneconomic regulatory constraints in two preliminary phases before a finding of substantial competition for access services in specific areas permits the detariffing of access services.

163. We seek comment on whether Phase 1, potential competition, would be achieved when an incumbent LEC has opened its network by removing the most immediate barriers to competitive entry. At this stage, we are seeking comment on targeted reforms that remove uneconomic regulatory requirements that inhibit incumbent LECs from charging access prices that reflect the cost differentials in serving different geographic areas, from lowering access prices non-predatorily, and from pricing optional new services based on market considerations. We are seeking comment on whether an incumbent LEC should be required to show that some or all of the following conditions exist to trigger Phase 1: (1) unbundled network element prices are based on geographically deaveraged, forward-looking economic costs in a manner that reflects the way costs are incurred; (2) transport and termination charges are based on the additional cost of transporting and terminating another carrier's traffic; (3) wholesale prices for retail services are based on reasonably avoidable costs; (4) network elements and services are capable of being provisioned rapidly and consistent with a significant level of demand; (5) dialing parity is provided by the incumbent LEC to competitors; (6) number portability is provided by the incumbent LEC to competitors; (7) access to incumbent LEC rights-of-way is provided to competitors; and (8) open and non-discriminatory network standards and protocols are put into effect. We anticipate that at least some incumbent LECs reasonably should be able to satisfy these conditions during 1997. We also invite comment on whether the first three possible conditions, which relate to the pricing of uses of the incumbent LECs' networks other than access, might be sufficient to permit certain of the access pricing reforms about which we are seeking comment.

164. We invite comment on whether Phase 2 would be met when an actual competitive presence has developed in the marketplace. For an incumbent LEC to demonstrate that Phase 2 has been achieved for a particular service or within a given area, we invite parties to comment on the following tests: (1) demonstrated presence of competition; (2) full implementation of competitively neutral universal service support mechanisms; and (3) credible and timely enforcement of pro-competitive rules. We also seek comment on whether an incumbent LEC should instead be eligible for Phase 2 treatment if it has made its facilities and services available in a reasonable and nondiscriminatory fashion, but no competitors have entered to serve the incumbent LEC's service area.²²² Would this be sufficient to address the public interest considerations involved in implementing the Phase 2 reforms?

²²² For example, new carriers may be unlikely to enter a high-cost area in the absence of a competitively neutral universal service mechanism.

165. We invite comment on this general approach to access reform, and on the specific regulatory reforms proposed and their respective competitive benchmarks. We also seek comment on whether these or other regulatory reforms should be implemented without the achievement of any competitive benchmarks, or upon the achievement of benchmarks different from those proposed.

166. The 1996 Act became law after we issued the *Price Cap Second Further NPRM*. Because many of the issues raised in that Notice are closely related to issues central to this proceeding, we here re-notice many of the proposed provisions to remove regulatory burdens contained in the *Price Cap Second FNPRM*. In developing this Notice we have considered the comments we received in response to the *Price Cap Second FNPRM*. Because of the intervening passage of the 1996 Act, however, we will limit the record in this proceeding to the comments received in response to this Notice. Parties who filed in response to the *Price Cap Second FNPRM* should not rely on those comments, but instead should file anew.²²³

167. As discussed in Section II.A, above, the removal of regulatory constraints considered in this section is applicable to incumbent LECs subject to price cap regulation. Arguably, small incumbent LECs are affected in the sense that regulatory constraints are not being removed for them as are some of the constraints for price cap incumbent LECs.²²⁴ Small incumbent LECs will not be otherwise affected by the proposals contained herein. While these proposals may indirectly affect small entities, especially competitive LECs and access customers, we anticipate that they will not have an impact on small entity reporting, record keeping, or other compliance requirements.²²⁵ We invite parties to comment on this analysis.²²⁶

B. Phase 1 -- Potential Competition

168. We propose to eliminate four significant regulatory constraints when an incumbent LEC can demonstrate that it faces potential competition for interstate access services in specific geographic areas: the prohibition against geographic deaveraging within a study area; the ban on volume and term discounts for interstate access services; the current prohibition against contract tariffs and individual request for proposals (RFP) responses; and

²²³ Parties may attach their *Price Cap Second FNPRM* comments as appendices and incorporate them by reference.

²²⁴ See Regulatory Flexibility Act, 5 U.S.C. § 601 *et seq.*

²²⁵ See Regulatory Flexibility Act, 5 U.S.C. § 603(b).

²²⁶ See also Section XI, *infra*.